

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2004/023265

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C08G73/02

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C08G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| X          | US 6 569 983 B1 (CHANG KIN-TAI ET AL)<br>27 May 2003 (2003-05-27)<br>cited in the application<br>column 1, line 7 - line 10<br>column 4, line 65<br>column 6, line 62 - line 63<br>----- | 1-17                  |
| X          | US 5 464 924 A (SILVIS H CRAIG ET AL)<br>7 November 1995 (1995-11-07)<br>example 1<br>column 4, line 25 - line 40<br>-----   | 1-17                  |
| X          | US 4 396 499 A (MCCOY DAVID R ET AL)<br>2 August 1983 (1983-08-02)<br>column 2, line 43 - line 50<br>-----<br>-/-  | 1-17                  |

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the International filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the International filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the International search

Date of mailing of the International search report

11 November 2004

22/11/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Müller, M

**INTERNATIONAL SEARCH REPORT**International Application No  
PCT/US2004/023265**C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category | Citation of document, with indication, where appropriate, of the relevant passages                        | Relevant to claim No. |
|----------|---|-----------------------|
| X        | WO 03/053536 A (ONDEO NALCO ENERGY SERVICES L) 3 July 2003 (2003-07-03)<br>example 30<br>-----            | 1-17                  |
| X        | US 6 315 908 B1 (SMITH GEORGE A)<br>13 November 2001 (2001-11-13)<br>column 2, line 14 - line 63<br>----- | 1-17                  |

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Interinal Application No

PCT/US2004/023265

| Patent document cited in search report |    | Publication date |          | Patent family member(s)  |  | Publication date         |
|--|----|------------------|----------|--------------------------|--|--------------------------|
| US 6569983                             | B1 | 27-05-2003       | WO       | 03054051 A1              |  | 03-07-2003               |
| US 5464924                             | A  | 07-11-1995       | NONE     |                          |  |                          |
| US 4396499                             | A  | 02-08-1983       | NONE     |                          |  |                          |
| WO 03053536                            | A  | 03-07-2003       | WO       | 03053536 A1              |  | 03-07-2003               |
| US 6315908                             | B1 | 13-11-2001       | CA<br>WO | 2362329 A1<br>0047524 A1 |  | 17-08-2000<br>17-08-2000 |